/13 cont./

Measure of This Space

804 Nothing would be more erroneous than to appraise the mass of the country according to our metric system. The real unit, which is the man's very same measure, is the duration of the effort of the agile walker or the notable perched on a mule at a lively trot. Moreover, it would be necessary that this duration be appraisable quantitatively. It is not, of course, in hours and
805 minutes. At the very most, the interval between prayers, themselves marked by the positions of the sun, could serve as a standard. But one hardly prays. To tell the truth, it is even looser measurements: morning, noon, evening, ṣṣbah', zziwal, iṣfirar, which would be the most sympathetic to the heart. But we shall not repeat here the reflections of Lucien Febvre on the "temps flottant" /fluctuating time/, the "temps dormant" /dormant time/ of societies of "médiéval" type (1).

1. L. Febvre, Le problème de l'incroyance au XVI^e siècle /The problem of unbelief in the sixteenth century/, 1942, pp. 426 to 434, and G. Friedmann, "L'homme et le milieu naturel /Man and the natural milieu/," Ann. hist. soc., 1945, II, pp. 109 sq.

804 Moreover, it being a question of mechanical time, I mean very
805 precisely time serving to measure or to divide up an effort very precise and of constant duration, it is indeed hours that we shall avail ourselves of in order to measure Seksawa space, just as the officers of the penetration did.

184 Let us disregard the immense confines which, beyond the
804 villages, on the Tichka side, as on that of the Ras Mulay Ali, extend much farther still. Seksawa life, the life of the valley bottom, which is the municipal life, the dense life with full potential, is measured by /14/ very slight durations. We shall see, in fact: the intercalary spaces correspond to other rhythms, entablatures separating the valleys, rounded summits, and, with

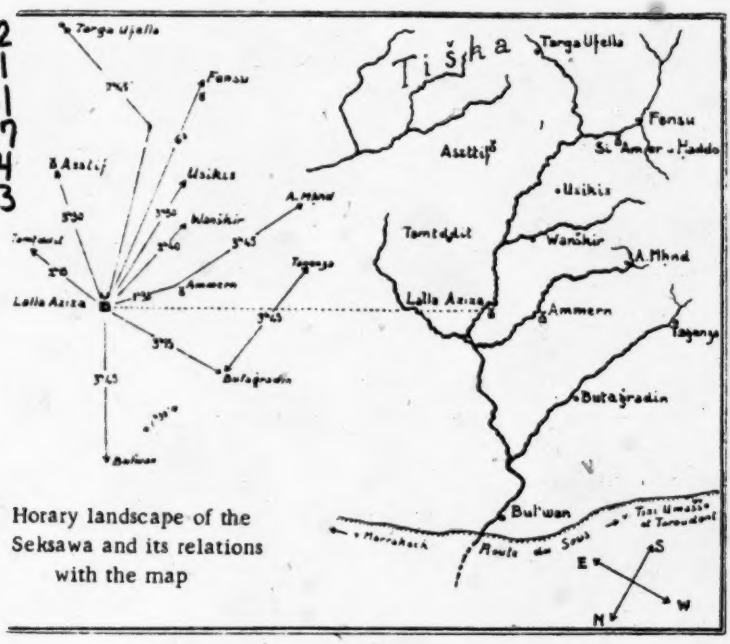
/14 cont./

184 804 stronger reason, intertribal pasturages. The shepherd's measure is not that of the village horticulturist; it is hardly that of the citizen. If one wanted to subtilize, one would also contrast to this measure of honest people that of the mule tracks, that of the military expedition. The latter disregards the beaten paths, arrives in lightning fashion, having crossed forests and escarpments. In the recent period a great warrior, Caïd Lmokhtar of the a. Lh'sen, would be a man of these unforeseen events, of these topographical lightning flashes, one might say. Measure of the shepherd, measure of the warrior: these variants, the one enlarging, the other taking up to excess Seksawa space, have their value as indices of the individual psychology and the social rhythms; one can eliminate them, however, in a careful analysis based on a certain civic constancy.

487 484 804 823 The rose of distances appearing in the sketch below (Fig. 3), 1 and whose heart is Lalla Aziza, suggests various reflections which will not be fruitless for understanding the milieu. These durations, calculated in walking time on the path that follows the bed, certainly reflect different factors, such as the difficulty of the terrain, the meanders, the multiplicity of fords, etc. But even more they express, and very exactly, the idea that the Seksawa of all times were able to have about the size of the cantons. And through this we are given most truly the dimensions of a history. What is manifest is the disproportion between the upper branches and the lower part of the rose. One view, based on the concepts of the plain -- and, let us take care here, on what others would the observers, from Ibn Khaldûn to us, base themselves on? -- stresses, be it in knowledge or action, the nearest sectors. The man of the plain loses his zeal to understand or to intervene in the same proportion as the distance increases and his eyes become weary on the snowy background. But one authentic view, the one that this society itself has, places the main point, on the contrary, high above, in the inviolate lair, the best defended in any case from intelligence /in the original text, double quotation marks follow the word renseignement, intelligence, information/ by the relief, legend, and an uncertainty

1. [For figure 3, see p.24--Analyst]

/14 cont./
487 gradually becoming opaque. The low valley will be only a cor-
484 ridor, an outlet, an appendix, or any other metaphorical equiva-
804 lent that one might wish to apply to it.
823 Consequently, how much is not explained by either the history of the fourteenth century, which shows us the expansion coming from the highlands, or the more recent history, which has reconstituted on these same altitudes, thanks to the conquering
177 afflux of people from the South, new bases of expansion! /15/ In
178 the same way, the true Seksawa life will only keep its accuracy,
804 in a space with its measure and according to its heart, far from



Horary landscape of the Seksawa and its relations with the map

FIG. 3

/15 cont./

177 804 178 the contaminations and meannesses of the plain, on this side of this radius of two to three hours' walk upstream from Lalla Aziza. Everything beyond, that is to say, everything downstream, will be subject to the influence of the powers and agitators from below.

484 804 Thus, zone of adventure, of hesitation, of mixtures. Still farther, in the plain, other ensembles, subject to other measures, can appear: what matters here is the horseman's journey, from bivouac to bivouac. But how this perspective of the horseman, that is to say, in the type, and for five hundred years, of the Arab, removes us from the montagnard world, this world so much more concentrated, more vigorous. One day's /16/ march, and one goes up the valley from end to end. The Idma domain, from the zaouia /Moslem monastery and school/ of Ammern to that of Assttif, covers, along its longest diagonal, five hours. About the same as from Iguntar to the Seksawa: the conquests of Caïd Lmokhtar are also registered at five hours on the diagonal. And scarcely more from Amerdul to the base of the Tichka: all the kingdom of the a. H'adduyws.

World of a density quite Mediterranean.

133 (127) Survey of the Structure of the Country (1)

1. This whole paragraph owes much to J. Dresch, Recherches sur l'évolution du relief dans le massif central du Grand Atlas, le Haouz et le Sous, 1941.

The traveler who, from the heights dominating the Tizi Umachchô, contemplates the panorama North notices that it is divided into three sections of different color: a white country, a red country, a black country.

Light limestones, Jurassic and above all Cretaceous, spread toward the N.-W. the stony causses of the Mtugga. Jurassic likewise, on the W., the long cylinder of the Lemgo. And

/149 cont./

312 [648] in the Todgha and the oases. In the matter of hydraulics, as perhaps for certain architectural forms, the Haouz and the Sous are tributaries of the h'arrat'in /Haratin/. Obviously, the ingenuity of the montagnards is concentrated on the adduction and the distribution rather than on the creation of the water. I well know [171] that this "creation" poses difficult problems, where European agronomy and its "rural genius" have lost in the art of empirical utilization and above all of collective organization what they gained in the domain of the kilowatt. The present analysis, being interested in gauging as far as possible to their exact level the different parts of an economic system, must emphasize successes and imperfections in it. The native hydraulics of the mountains, like that of the piedmont, is more an art of planes and surfaces than of the depths that the men of the oases readily reach.

/150/ Use of the Water

Here we are at the stage where the water, whatever its origin may be, is concentrated in the reservoir in order to distribute it to a given point. It leaves by a channel, which serves one or several "quarters," tamazirt /Fig. 7 appears here/ or tighmert, each being connected to it by its particular "intake," aǧder or ighin. The latter feeds a supply ditch, which, by secondary intakes, feeds other ditches. These ditches are called "for distribution" or "discharging," depending on whether they open, directly or not, on the planches to be irrigated. These are the asaru, plur. isura. In fact, a whole liquid arborescence ramifies out from the big channel, connected to a reservoir, down to the last grooves. There, /151/ "ados" /sheltered beds/, abadu, plur. ibuda, finally determine the little quadrilateral of level, irrigable by submersion, the "planche," uz'un.

Naturally, the distribution of water among rightful claimants calls for an endless fractioning. It almost always works according [804] to a rhythm in time. The cycle is of variable fullness according to the groups: week, ten or fifteen days. Thus it includes a certain number of basic units often called tiferday (sing. taferdit),

[TEXT CONTINUED ON PAGE 211]

151 cont./

312 804 "the entire day" or "the half day," distributed in "parts," tawala, plur. tiwaliwin. For each tawala there is a multitude of rightful claimants, each of whom only benefits from a fraction or subfraction. The estimation of it is done sometimes with the aid of instruments such as a kind of clepsydra, called tat't'aqt, or further by gauging in the reservoir.

But how does this water, distributed in so sagacious a fashion, act once it has come to the echelon of utilization? There again, an abrupt lag in the technique. At the end one finds no more than the procedure of submersion. Its letters of African authen- [191] ticity are moreover immemorial, since it is the same method that the peasants of the Nile practiced until a recent epoch (1).

1. J. Brunhes, L'irrigation dans la péninsule ibérique et dans l'Afrique du Nord /Irrigation in the Iberian Peninsula and in North Africa/, 1903, p. 210, citing various works. See especially Descriptions de l'Egypte, 1824, t. XVII, pp. 10 sq., and the recent book by Muh'ammad Fahîm, Uçûl az-zirâ^{c}a, al-Qâhira, 1952, pp. 37 sq. The manual of Rivière and Lecq, Traité pratique d'agriculture pour le N. d'Afrique /Practical treatise on agriculture for North Africa/, 1928, t. I, p. 185 sq., comments on the harmful effects of poorly managed irrigation, the exact modules needed by each crop (p. 193).

312 241 The long saturation of the soil and of the plant by water is judged here to be the only efficient method. Preliminary to the tillage one practices a first inundation: this is the adunkal. Then a second one, intended to "break up the clods": this is the tirz'i wut't'ib. Then others "for soaking," isswi. Near the plain, the [184] a. Abdella practice three of them for barley, which conforms to [243] the data of our experimental agronomy of the South. But higher, the a. Lh'sen and especially the Idma multiply them as often as possible: up to 10 or even 12 times. Perhaps because the